What is claimed is:

1. A purified, host-specific, non-toxic, wide host range and virulent bacteriophage preparation consisting essentially of a bacteriophage that is effective in killing bacterial organisms *in vivo*, whereby said bacterial organism is selected from the group consisting of staphylococci, hemophilii, helicobacter, mycobacterium, mycoplasmi, streptococci, neisserii, klebsiella, enterobacter, proteus, bacteriodes, pseudomonas, borrelii, citrobacter, escherichia, salmonella, propionibacterium, treponema, shigella, enterococci and leptospirex.

2. The bacteriophage preparation as claimed in claim 1, wherein said bacterial organism is selected from the group consisting of *Staphylococcus aureus, Staphylococcus epidermidis, Helicobacter pylori, Streptococcus pneumoniae, Streptococcus mutans, Streptococcus oralis, Streptococcus parasanguis, Streptococcus pyogenes, Streptococcus viridans,* Group A streptococcus and anaerobic streptococcus, *Hemophilus influenzae, Shigella dysenteriae, Mycobacterium tuberculosis, Mycobacterium leprae, Mycobacterium asiaticum, Mycobacterium intracellulare, Mycoplasma pneumoniae, Mycoplasma hominis, Neisseria meningitidis, Neisseria gonorrhea, Klebsiella pneumoniae, Pseudomonas aeruginosa, Propionibacterium acnes, Treponema pallidum, Treponema pertanue, Treponema carateum, Escherichia coli, Salmonella typhimurium, Borrelia burgdorferi,* Leptospirex, such as *Leptospirex hemoragia* and *Citrobacter fruendii.*

3. The bacteriophage preparation as claimed in claim 2, wherein the bacterial organism is *Staphylococcus aureus.*

4. The bacteriophage preparation as claimed in claim 2, wherein the bacterial organism is *Streptococcus pyogenes.*

5. The bacteriophage preparation as claimed in claim 2, wherein the bacterial organism is *Citrobacter fruendii.*

6. The bacteriophage preparation as claimed in claim 2, wherein the bacterial organism *Klebsiella oxytoca*.

7. The bacteriophage preparation as claimed in claim 2, wherein the bacterial organism is *Escherichia coli*.

8. The bacteriophage preparation as claimed in claim 2, wherein the bacterial organism is *Salmonella typhimurium*.

9. A composition comprising a bacteriophage preparation as claimed in claim 2, and a pharmaceutically acceptable carrier.

10. The composition as claimed in claim 9, wherein the carrier is in the form of a liposome.

11. The composition as claimed in claim 9, wherein the carrier is a dendrimer.

12. A method of treating a mammal suffering from infection by a bacterial organism, comprising administering to the mammal the composition as claimed in claim 9, in an amount and for a period of time sufficient to substantially kill the bacterial organism.

13. The method as claimed in claim 12, wherein the bacterial organism is *Staphylococcus aureus*.

14. The method as claimed in claim 12, wherein the bacterial organism is *Streptococcus pyogenes*.

15. The method as claimed in claim 12, wherein the bacterial organism is *Citrobacter fruendii*.

16. The method as claimed in claim 12, wherein the bacterial organism *Klebsiella oxytoca*.

17. The method as claimed in claim 12, wherein the bacterial organism is *Escherichia coli*.

18. The method as claimed in claim 12, wherein the bacterial organism is *Salmonella typhimurium*.

19. A method of treating a mammal suffering from infection by a bacterial organism, comprising administering to said mammal (i) the composition as claimed in claim 9 and (ii) an antibiotic, in an amount and for a period of time sufficient to substantially kill said bacterial organism.

20. The method as claimed in claim 19, wherein the antibiotic is selected from the group consisting of aminoglycosides, cephalosporins, macrolides, erythromycin, monobactams, penicillins, quinolones, sulfonamides and tetracycline.

21. A method of making a purified, host-specific, non-toxic, wide host range and virulent bacteriophage preparation consisting essentially of a bacteriophage that is effective in killing bacterial organisms *in vivo* as claimed in claim 1, comprising

(a) obtaining a sample containing a bacteriophage to at least one bacterial organism selected from the group consisting of staphylococci, hemophilii, helicobacter, mycobacterium, mycoplasmi, streptococci, neisserii, klebsiella, enterobacter, proteus, bacteriodes, pseudomonas, borrelii, citrobacter, escherichia, salmonella, propionibacterium, treponema, shigella, enterococci and leptospirex;

(b) dispersing the sample in phosphate buffered saline;

(c) filtering the dispersed sample through a filter that will retain the bacterial organism and allow the bacteriophage to pass;

(d) purifying the bacteriophage that passes through the filter;

(e) growing bacteriophage in medium containing at least one of the bacterial organisms;

(f) selecting and isolating bacteriophage preparations achieving titers higher than about 10^8 to 10^9 bacteriophages per plaque after about eight hours to provide an isolated bacteriophage;

(g) purifying the isolated bacteriophage; and

(h) repeating steps (e)-(g) at least 5 times using the purified isolated bacteriophage of step (g) in step (e) to prepare a purified, host-specific, non-toxic, wide host range and virulent bacteriophage preparation.

22. A method of making a purified, host-specific, non-toxic, wide host range and virulent bacteriophage preparation consisting essentially of a bacteriophage that is effective in killing bacterial organisms *in vivo* as claimed in claim 1, comprising

obtaining a sample containing a bacteriophage to at least one bacterial organism selected from the group consisting of staphylococci, hemophilii, helicobacter, mycobacterium, mycoplasmi, streptococci, neisserii, klebsiella, enterobacter, proteus, bacteriodes, pseudomonas, borrelii, citrobacter, escherichia, salmonella, propionibacterium, treponema, shigella, enterococci and leptospirex;

dispersing the sample in phosphate buffered saline;

filtering the dispersed sample through a filter that will retain the bacterial organism and allow the bacteriophage to pass;

purifying the bacteriophage that passes through the filter;

growing bacteriophage in medium containing at least one of the bacterial organisms;

selecting and isolating bacteriophage preparations achieving titers higher than about 10^8 to 10^9 bacteriophages per plaque after about eight hours to provide an isolated bacteriophage;

subjecting the isolated bacteriophage to at least one mutating condition selected from the group consisting of mutator host, irradiation, temperature and pH extremes, ionic variation, drying or overhydration, extreme ionic concentration and

heat shock, whereby at least one bacteriophage survives the at least one mutating condition; and

isolating and purifying the bacteriophage that survived the at least one mutating condition to prepare a purified, host-specific, non-toxic, wide host range and virulent bacteriophage preparation.